

Chronotype and Social Support in Enhancing Subjective Well-being of Adolescents

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ABSTRACT

Adolescents' well-being is important for both personal and societal welfare. It is supposed to be a transitional period of their life span. Several factors that contribute to our whole life well-being are acquired or solidified at this stage. In the present study, for enhancing well-being and its components like flourishing, positive and negative affect and life satisfaction, the role of social support and chronotype have been investigated. The sample of 200 students (both boys and Girls) studying in classes IX and X was selected from public schools of Darbhanga town. They were administered the flourishing scale, SPANE scale, life satisfaction scale, social support and chronotype scale. The t-ratio, Pearson Coefficient, and Multiple regression were computed to test the hypotheses advanced. Except for life satisfaction, no significant differences were obtained between morning type and evening type of students on flourishing and positive and negative affect measures. However, support from family members emerged as a significant predictor of all three components of well-being. Chronotype and Support from others like teachers emerged as a significant predictor of only life satisfaction. Findings were discussed in light of previous research carried out.

Keywords: *Flourishing, Positive Affect, Negative Affect, well-being, Life Satisfaction, chronotype, Social Support.*

In an article by Ross et al (2020), it was reported that a meeting with the member countries of the UN was conveyed in 2015 and the agenda was drafted and duly signed the "2030 Agenda for Sustainable Development". Altogether 17 key indicators were identified for "Sustainable Development Goals". Its prime objective was to "ensure healthy lives and promote well-being for all at all ages." Further, the United Nations drafted a plan which was known as "Secretary General's Global Strategy for Women's, Children's and Adolescents' Health (2016–2030)". Its purpose was to safeguard and promote health and well-being for children, adolescents and women.

Adolescents' well-being is important for both personal and societal welfare. It is supposed to be a transitional period of their life span. Several factors that contribute to our whole life

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Chronotype and Social Support in Enhancing Subjective Well-being of Adolescents

well-being are acquired or solidified at this stage. Both direct effects and indirect effects of several factors like social support on well-being have been seen Covid-19 pandemic. It further strengthened the role of social support in enhancing the well-being of adolescents.

Several models of well-being have been developed by psychologists in which two conceptual model of well-being (Dodge, Daly, Huyton, 2012) is much more prominent: subjective and objective. Subjective well-being emphasizes personal experiences as well as individual fulfilment. It includes eudaemonic well-being, and hedonic well-being (Stephens, Deaton, Stone, 2015). For example, questions like finding the meaning of life, a sense or feeling of personal growth etc. are an example of eudemonic well-being whereas feeling happy, satisfied with their life etc are an example of hedonic well-being. On the other hand, objective well-being is defined as equality of life. The indicators are material and social resources. Income, food, and housing etc. are material resources and education, health, freedom of expression, social connections etc. are social resources (Western & Tomaszewski, 2016). Sen (2005) argued that the objective indicators of well-being are generally seen in terms of individual abilities. It includes both functioning and the opportunities of the individuals.

White (2017) developed a new term of well-being which he called "Relational well-being". It states that a person's well-being is primarily influenced by his/her relationships with surroundings. Relational well-being is defined as emerging "...through the dynamic interplay of personal, societal, and environmental structures and processes..." (White, 2017). The Gallup World Poll (Commonwealth Secretariat; London: 2016) used subjective well-being measures. They also used the psychological need satisfaction scale and frustration scale. subjective well-being measures and the Global Youth Development Index and Developmental Asset Scores as measures of objective well-being (Hinson, Kapungu, & Jessee, 2016, 2016).

In general, well-being is concerned with the experience of good health, the feeling of happiness, and prosperity. Well-being also includes some other aspects like having good mental health, a higher level of life satisfaction, purpose and meaning in life and the capability to deal with stress. Diener (1984) developed a model of subjective well-being, popularly known as the "Tripartite Model". It is considered one of the most comprehensive models of well-being. It is the collection of three separate components of subjective well-being. The components are frequent positive affect, infrequent negative affect, and life satisfaction. Both frequent positive affect and infrequent negative affect are collectively known as affective well-being. On the other hand, life satisfaction is a cognitive component of well-being.

Later, Carol Ryff's (1989) postulated a psychological well-being model which is comprising of six components. These six components are a. Personal growth, b. Self-acceptance, c. Purpose in life, d. Environmental mastery, e. Autonomy, and f. Positive relations with others. The Ryff's model was later extended by Corey Keyes et al. in 2002. They evolved the term mental well-being which incorporates three components: psychological well-being, subjective well-being, and social well-being. Emotional or subjective well-being is also known as hedonic well-being. It is concerned with the subjective aspects of well-being. The psychological and social well-being together is called Eudemonic well-being. Eudemonic well-being is concerned with skills, abilities, and psychological and social functioning.

Chronotype and Social Support in Enhancing Subjective Well-being of Adolescents

Martin Seligman delivered his Presidential Speech in the inaugural session of the American Psychological Association and explained there in detail the framework and the scope of positive psychology. He states that skills that build flourishing and that alleviate distress are two different things. Both are not two opposite ends of a continuum. Like human distress, human strength, excellence, flourishing etc. are authentic. People want to live meaningful life. The life that we live should have some purpose. People also want to grow their capabilities for constructive work, love, creativity, resilience, wisdom etc. Seligman (2011) wrote a book "Flourish" in which he explained his PERMA model in detail. The PERMA is made up of five components, each starting in alphabetical order of the PERMA. These are positive emotion, engagement, relationship, meaning and purpose, and accomplishment. According to him, different people originate well-being from these five factors to varying degrees. It is because a good life for a student may be different to the good life of a farmer. There are several ways by which a person can lead a flourishing life.

Chronotype

The publication of a PhD thesis in psychology by Oquist in 1970 at the University of Goteborg, Sweden is supposed to be the beginning of modern research on chronotype. He sketched out a clearcut chart of individual Circadian Rhythms. Pacheco. (2022) states that chronotype is the natural predisposition of our body to sleep at a fixed time. Some people are being early birds whereas others are night owls. Chronotype not only influence our sleep and wake time, but it also influences our hunger, exercise, and body temperature. It is the chronotype that we feel more alert at a particular time during the day and sleepier at the night.

Sleep chronotype is strictly associated with circadian rhythm. It controls our daily sleep-wake cycle. It releases a hormone that is known as melatonin which provides environmental cues i.e., light and temperature. However, it can be altered by a strict work schedule. For example, owls may be able to wake up in the morning at 7 o'clock, but they will not feel as active as at night. Similarly, birds wake up in the early morning feel fresh and more active at 7 am, but they became sleepy in the late afternoon.

It seems important to mention here that chronotype does not influence a person's total sleep time. Suppose a person needs seven to nine hours of sleeping time at night, it is very easy for a person to have an early bird chronotype. On the other hand, it is difficult for those who are night owl type. It is; therefore, night owls are facing problems to adapt to traditional work schedules. Researchers found that it is very difficult to change the chronotype of a person for his entire life. When a person's inborn chronotype is disturbed by the work schedule, he/she may experience social jetlag (Rutters et al. 2014).

Chronotype is influenced by several factors like age, heredity, and other factors. Some research findings suggest that chronotype is also affected by changes in geographical location and daylight hours. However, children are generally early chronotype (Lane, Vlasac, Anderson et al., 2016). It is a myth that adolescents are lazy and they feel difficulty waking in the early morning. On average, adolescents wake up between 7 am to 8 am. It is also true that after attaining older adulthood bedtime and wake-up time slightly shift earlier. Females are supposed to be an earlier chronotype than males. This phenomenon is seen largely due to societal and cultural factors. In our country, household workers like cooking, washing etc. are to be performed by females (Adan & Natale, 2002).

Chronotype and Social Support in Enhancing Subjective Well-being of Adolescents

Several kinds of research conducted on young adults show that morning-type and evening-type people are different in well-being and susceptibility to psychiatric illness. DeYoung et al. (2007) found that early risers or morning type tend to have more stable personalities in comparison to evening-type people. According to Randler (2008), morning-type people have a better probability of subjective well-being. Paine, Gander & Travier (2006) found that evening types of people reported poor general health. Several studies have found an association between chronotype and personality traits. For example, two personality traits like conscientiousness and agreeableness are associated with morning type. On the other hand, the evening type is correlated with neuroticism and openness to experience dimension of personality. However, some studies have found contradictory evidence for whether extraversion type personality is characteristic of morning or evening types (Staller & Randler, 2021).

Some studies have outlined that morning-type students do well in academic achievement, while evening types students perform better in an aptitude for creativity. Therefore, it is difficult to state whether morning or evening-type traits are innate or acquired or secondary factors. For example, generally, school tends to start in the morning and students have only time in the evening to involve themselves in several creative activities. Whether the person is an early bird or a night owl, some other negative factors contribute to a lower level of physical and mental well-being. People who have to follow a schedule that doesn't match their chronotype may be able to change their circadian rhythm with the help of several techniques like melatonin supplements, maintaining sleep hygiene, light therapy etc. This can help reduce sleeping disorders like insomnia and the effects of social jetlag. Zencirci and Arslan (2011) conducted a study on 524 nurses who work shifts and found that several socio-demographic factors did not affect the quality of sleep. People who didn't sleep well had very high levels of burnout. Nurses who worked the same shift every day slept better than those whose shifts changed every day or periodically. Hasan, Jankowski, and Khan (2022), did a study on school and college students during the Covid-19 pandemic and found that due to changes in sleep and woke time affected their mood and health.

Social Support

Social support is an important factor that affects a student's health and happiness. Rathus (1975) opined that psychological pressures like anxiety, depression, stress, etc. can be adjusted and lessened with social support. He talked about the four different ways our social network helps us from psychological disturbances and enhance our wellbeing: emotional support, instrumental support, appraisal support and informational support. Emotional support is listening to a person's problems and showing sympathy, care, comfort etc. Instrumental support is helping a person with the material need. Informational support is providing advice and techniques to improve coping skills. (4) Appraisal support is the feedback of others about how well a person is doing (Helgeson & Lapoz, 2010).

Vaux (1988) wrote about several models of social support in his book in which he incorporated two important models of social support devised by the American Psychiatric Association: the buffering and the direct effects hypothesis. The buffering hypothesis states that social support protects people from the harmful effects of stressful life events (Barrera, 1986; Cohen & Wills, 1985). The direct effects hypothesis, on the other hand, states that people who have a lot of social support are feeling healthier and happier, no matter how much stress they have (Cohen & Wills, 1985).

Chronotype and Social Support in Enhancing Subjective Well-being of Adolescents

Janevic et al. (2004) concluded that the health of older women is strongly associated with informational, and material support from family members and friends Poudel, Gurung, and Khanal (2020) studied 348 students of classes 9 and 10 of the government secondary schools in Nepal and found self-esteem as a mediator between perceived social support and psychological well-being. Adolescents who have a lot of social support and a high level of self-esteem also reported being psychologically healthy.

In nutshell, subjective well-being is an important conceptual pillar of positive psychology. It consists of both positive and negative affect, life satisfaction and flourishing. These three components are influenced by several factors in which some of the important are morning-evening circadian rhythm, social support, and gratitude and their effect would be assessed here.

Objective and Hypothesis

Several studies have pointed out that well-being has several tangible and intangible advantages for human beings. Now it is supposed to be an important parameter of the prosperity of a society or country as a whole. The experience of general well-being encourages people to pursue goals to develop the capability to face future challenges.

At the physiological level, positive emotion, one of the components of subjective well-being, improves our immune system, endocrine system and cardiovascular functioning. On the other hand, negative emotions badly affect our metabolic processes. Cohen et al. (2003) in the study found that positive emotions were more often associated with our strong immune system and it helps us to protect ourselves from infection. In another study, Bhattacharyya and others (2008) found that positive feelings contribute to better cardiovascular functioning. On the basis of a large sample of 21 countries, Grant et al. (2009) found that life satisfaction is linked with a greater possibility of doing physical exercise and a lowering probability of smoking. Kubzansky et al. (2012) observed that distressed adolescents are commonly found overweight. However, unhappiness is linked with destructive behaviours which, in turn, create further health problems.

Many factors influence our well-being. Some of the important are strong social support, a morning type of sleeping rhythm, having a sense of practising gratitude etc. However, some findings have reported reverse findings. Most of the research was carried out in the West. Subjective well-being is largely determined by cultural and societal factors. Further, factors that contribute to subjective well-being in older people may or may not be the determining factors of the SWB of adolescents.

Keeping all these issues in mind, the present study was carried out to address the following important objectives:

1. To measure the effect of chronotype on wellbeing
2. To measure the association between social support received and well-being.

Hypothesis:

The following hypotheses would be tested in the present research:

1. There would be a positive correlation between social support and different dimensions of well-being.
2. There would be a positive correlation between Chronotype and different dimensions of well-being.

METHODS

Sample

This study was conducted on a sample of 200 students studying in class X to Class XII of different public schools in Darbhanga town. The purposive sampling technique was used to select respondents. To make the sample more representative, students of different schools of both sexes were selected. The mean age of the respondent was 16.32 years with an age range of 12 years to 20 years. Out of 200 samples, 106 boys and 94 girls participated in this study.

Measures:

A schedule was prepared to consist of the following measures:

1. Satisfaction with Life Scale (SWLS)

Diener et al. (1985) developed a scale to measure overall life satisfaction. This is a short form of life satisfaction. It consists of only 5 items. It was developed to measure comprehensive cognitive judgments of individual life satisfaction. It is a Likert-type seven-point scale. The responses varied from extremely agree (7) to extremely disagree (1).

2. Positive and Negative Experience Scale

Diener et al. (2010) developed a scale popularly known as SPANE. It consists of 12 items. The six items were prepared to measure positive affect feelings and the remaining six items were for measuring negative feelings. Three items each for general and three specific positive and negative affect items were prepared.

3. Flourishing Scale

Diener et al. (2009) developed a scale to measure the flourishing level. It consists of eight items that reflect various facets of human functioning. Items are designed to measure positive relationships with other people who are rewarding, a sense of competence that all important activities will be performed smoothly, and the sense of greater purpose of this life.

4. Social Support Scale:

Zimet et al (1988) developed a scale to measure both perceived and received social support. It is a 12-item scale. Each is rated on a 7-point scale. The social support scale is designed more specifically to measure the subjective assessment of support. It also measures perceptions of social support received from family, friends, and significant others. The social support scale has both high reliability and validity.

5. Morning-evening Chronotype Scale

This scale was developed by Adan et al. (2012). This scale was originally designed by Horne & Ostberg in 1976. The original scale consisted of 19-item which was too long to be administered. The present scale used in this study is a brief version having only 5 items. A high score is indicative of a morning-type personality, while a low score expresses an evening-type personality.

RESULT

The present research is based on a correlational research design. Several statistical analyses were computed in light of hypotheses advanced earlier. To ascertain the data is normally distributed and parametric statistics were applied here. Pearson's measure correlation of subjective well-being parameters like life satisfaction, Positive and Negative Affect, and Flourishing with various dimensions of Social Support. Multiple regression analysis was computed to measure the predictive effect of chronotype and social support on wellbeing.

Chronotype and wellbeing

To measure the difference between morning-evening chronotype and subjective well-being, a t-test of the data obtained on the measures of chronotype and three aspects of subjective

Chronotype and Social Support in Enhancing Subjective Well-being of Adolescents

well-being, i.e., flourishing, affective balance and life satisfaction were computed using SPSS software. The obtained results are presented here in Table-1.

Table-1 Differences in the well-being between morning-evening type respondents

Wellbeing	Chronotype	N	Mean	Std. Deviation	T	Sig.
Flourishing	Morning Type	136	31.3603	4.22983	1.590	.114
	Evening Type	64	30.3281	4.39717		
Affective Balance	Morning Type	136	7.5956	6.55843	.897	.371
	Evening Type	64	6.7188	6.19900		
Life Satisfaction	Morning Type	136	16.3529	2.90218	3.583	.000
	Evening Type	64	14.7500	3.05505		

Overview of the results, it is reflected here that there is a significant difference between the morning-evening chronotype and life satisfaction of the adolescents ($t= 3.583.270$, $p<.000$). On the other hand, no significant difference between the morning and evening chronotype with flourishing ($t= 1.590$, $p>.05$) or affective balance ($t=.897$, $p>.05$). It is usually seen that flourishing and positive affect is purely an individual phenomenon and it has nothing to do with our chronotype. A person is either an early riser or a late riser, both may have a high or low level of flourishing and positive affect. Further, a sample taken here are adolescents, studying in X and XI classes, their sleeping patterns are largely influenced by their school timing and other assignments in the coaching centre. Most of them were morning type. Therefore, a significant difference was not obtained between morning and evening chronotypes on flourishing and positive affect.

When people are working in shifts, their sleeping pattern is largely altered which influences well-being in some way. Kim and Jang (2022) in a study conducted on nurses from three South Korean university hospitals. Regression analysis reflected that social jetlag altered in the evening shift. It increased anxiety significantly. As a result, their premenstrual symptoms are largely influenced. Further, individuals' chronotypes and preferences to work the night shift evolved as significant predictors of premenstrual symptoms.

Relationship between Chronotype and Wellbeing

To measure the relationship between social support received by respondents and their well-being state, Pearson's coefficient of correlations was computed on responses obtained on these two variables. Results are given in table-2.

Table-2 Correlation between dimensions of social support and well-being

Variables	Flourishing	Affective Balance	Life Satisfaction
Support Others	.188**	.158*	.320**
Family Support	.306**	.284**	.227**
Friends Support	.099	.189**	.238**
Overall Social Support	.253**	.271**	.350**

It states that three components of social support, i.e., support from others, family support and friends support were significantly correlated with all three dimensions of well-being except the correlation between friends support and flourishing ($r=.099$, $p>.05$). Other obtained correlations are significant at .01 level. It signifies the role of social support in enhancing the well-being of adolescents. It builds up an umbrella when they are confronted with a problem. This is supported by several other studies (Gulacti, 2010; Siedlecki, 2014).

Chronotype and Social Support in Enhancing Subjective Well-being of Adolescents

Brajsazganec and Lipovcan (2017) in a study examined how social support contributes to well-being in terms of happiness, and life satisfaction. They found that in every age group, support from friends has emerged as a significant predictor of subjective well-being.

Effect of the Dimensions of social support on the Dimensions of Subjective Wellbeing

When three dimensions of social support and chronotype were taken as a predictor of flourishing, affective balance and life satisfaction and multiple regression were computed, it was observed that family support emerged as a significant predictor of flourishing ($B=.411$, $p<.000$). Similarly, family support also emerged as a significant predictor of affective balance ($B=.568$, $p<.000$) and life satisfaction ($B=.144$, $p<.04$). on the other hand, other support ($B=.190$, $p<.003$) and chronotype emerged as a significant predictors of life satisfaction. Friend support did not emerge as a predictor of any dimensions of well-being.

Table-3 Multiple Regression showing social support and chronotype as predictor of well-being

Dep. Variable	Predictors	R	F	B	Significance
Flourishing	Support Others	.321	5.587 P<.000	.119	.215
	Family Support			.411	.000
	Friends Support			-.013	.896
	Chronotype			.052	.641
Affective Balance	Support Others	.315	5.377 P<.000	.020	.891
	Family Support			.568	.001
	Friends Support			.230	.102
	Chronotype			.102	.547
Life Satisfaction	Support Others	.439	11.608 P<.000	.190	.003
	Family Support			.144	.048
	Friends Support			.072	.365
	Chronotype			.301	.000

DISCUSSION

Social support and well-being are both multi-dimensional constructs. Thus, we intended to conduct a comprehensive investigation between two constructs. Similarly, the investigation was also made to show the differences in the well-being of morning and evening type of adolescents. To measure the social support and chronotype as predictors of flourishing, affective balance and life satisfaction which is commonly known as subjective well-being, findings are consistent with previous research (Walsh et al., 2022; Wills et al., 2021). Here, it was found that not all dimensions of social support equally contributed to the enhancing well-being of adolescents. Friends' support did not emerge predictor of flourishing, affective balance and life satisfaction. On the other hand, family support was at the top in enhancing well-being either on positive affect or life satisfaction. Other support played a significant role in enhancing the flourishing aspect of well-being. More specifically, life satisfaction was predicted by perceived other support, and positive affect and negative affect were predicted by family embeddedness.

Chronotype is described as morning and evening type. It may also be said as night owls and early birds. A third category of chronotype has also evolved and is known as "hummingbirds." However, a few researchers have evolved a fourth type known as "bimodal". It was observed here an individual difference in the sleep-wake mechanism. In the present research, chronotype has emerged as a significant predictor of the life satisfaction

Chronotype and Social Support in Enhancing Subjective Well-being of Adolescents

component of well-being. Kornienko et al. (2021) also found that chronotype is related to several biological, psychological and social factors. Anxiety, depression, and other physical health problems are generally linked to evening type in the clinical as well as non-clinical populations. At the same time, the morning type reveals a positive relationship with well-being.

CONCLUSION

Well-being has operationally been defined in terms of positive and negative affect, flourishing and life satisfaction. Well-being is enhancing adolescents who received social support, particularly support from family members. It is the family members who take care of their adolescent members studying in a school or college. Support from others like teachers and other surrounding also playing important role in enhancing students. Chronotypes in the present study did not emerge as significant predictors of all the dimensions of well-being, except life satisfaction. The mixed results further, the open avenue to carry out further intensive results.

REFERENCES

- Adan, A., Archer, S. N., Hidalgo, M. P., Di Milia, L., Natale, V., & Randler, C. (2012). Circadian typology: a comprehensive review. *Chronobiology International*, 29(9), 1153-1175.
- Adan, A. & Natale, V. (2002). Gender differences in morningness-eveningness preference. *Chronobiol Int.* 19(4), 709-20. doi: 10.1081/cbi-120005390. PMID: 12182498.
- Barrera Jr, M. (1986). Distinctions between social support concepts, measures, and models. *American Journal of Community Psychology*, 14(4), 413-445.
- Bhattacharyya, T., Nicholls, S. J., Topol, E. J., Zhang, R., Yang, X., Schmitt, D., ... & Hazen, S. L. (2008). Relationship of paraoxonase 1 (PON1) gene polymorphisms and functional activity with systemic oxidative stress and cardiovascular risk. *Jama*, 299(11), 1265-1276.
- a * Procedia Social and Behavioral Sciences 2 (2010) 3844–3849
- Brajsa-Zganec, A.; Kaliterna, L., & Markovic, I.H. (2018). The Relationship between Social Support and Subjective Well-Being across the Lifespan, BR1, STR, 47-65, DOI: 10.5559/di.27.1.03
- Cohen, S., & Wills, T. A. (1985). Stress, social support, and the buffering hypothesis. *Psychological Bulletin*, 98(2), 310.
- Cohen, I. L. (2003). Criterion-related validity of the PDD Behavior Inventory. *Journal of Autism & Developmental Disorders*, 33(1).
- DeYoung, C. G., Quilty, L. C., & Peterson, J. B. (2007). Between facets and domains: 10 aspects of the Big Five. *Journal of Personality and Social Psychology*, 93(5), 880.
- Diener, E. (1984). Subjective well-being. *Psychological Bulletin*, 95(3), 542.
- Diener, E. D., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The satisfaction with life scale. *Journal of Personality Assessment*, 49(1), 71-75.
- Diener, E., Scollon, C. N., & Lucas, R. E. (2009). The evolving concept of subjective well-being: the multifaceted nature of happiness.
- Diener, E., Wirtz, D., Tov, W., Kim-Prieto, C., Choi, D. W., Oishi, S., & Biswas-Diener, R. (2010). New well-being measures: short scales to assess flourishing and positive and negative feelings. *Social Indicators Research*, 97, 143-156
- Dodge, R., Daly, A. P., Huyton, J., & Sanders, L. D. (2012). The challenge of defining well-being, 2, 222–235.
- Gore, S. (1978). The effect of social support in moderating the health consequences of unemployment. *Journal of Health and Social Behaviour*, 157-165.

Chronotype and Social Support in Enhancing Subjective Well-being of Adolescents

- Grant, A. M., & Parker, S. K. (2009). 7 Redesigning work design theories: the rise of relational and proactive perspectives. *The Academy of Management Annals*, 3(1), 317-375.
- Guaçtía · 2010; The effect of perceived social support on subjective well-being Fikret GülaçtÖ
- Hasan, M. M., Jankowski, K. S., & Khan, M. H. (2022). Morningness-eveningness preference and shift in chronotype during COVID-19 as predictors of mood and well-being in university students. *Personality and Individual Differences*, 191, 111581.
- Helgeson, V. S., & Lopez, L. (2010). Social support and growth following adversity. *Handbook of Adult Resilience*, 309-330.
- Hinson, L., Kapungu, C., Jessee, C., Skinner, M., Bardini, M., & Evans-Whipp, T. (2016). Measuring positive youth development toolkit: A guide for implementers of youth programs. *Washington, DC: YouthPower Learning, Making Cents International*, 1-20.
- Horne, J. A., & Östberg, O. (1976). A self-assessment questionnaire to determine morningness-eveningness in human circadian rhythms. *International Journal of Chronobiology*.
- Janevic, M. R., Janz, N. K., Dodge, J. A., Wang, Y., Lin, X., & Clark, N. M. (2004). Longitudinal effects of social support on the health and functioning of older women with heart disease. *The International Journal of Aging and Human Development*, 59(2), 153-175.
- Keyes, C. L. (2002). The mental health continuum: From languishing to flourishing in life. *Journal of Health and Social Behaviour*, 207-222.
- Kornienko, D. S., Derish, F. V., & Rudnova, N. A. (2021). Chronotype and Life Satisfaction: The Role of Sex and Age. *Lurian Journal*. 2(3), 76-87.
- Kubzansky, L. D., Gilthorpe, M. S., & Goodman, E. (2012). A prospective study of psychological distress and weight status in adolescents/young adults. *Annals of Behavioral Medicine*, 43(2), 219-228.
- Lane, J. M., Liang, J., Vlasac, I., Anderson, S. G., Bechtold, D. A., Bowden, J., ... & Saxena, R. (2017). Genome-wide association analyses of sleep disturbance traits identify new loci and highlight shared genetics with neuropsychiatric and metabolic traits. *Nature Genetics*, 49(2), 274-281.
- Monroe, S. M. (1983). Major and minor life events as predictors of psychological distress: Further issues and findings. *Journal of Behavioural Medicine*, 6(2), 189-205.
- Pacheco. (2022)
- Paine, S. J., Gander, P. H., & Travier, N. (2006). The epidemiology of morningness/eveningness: influence of age, gender, ethnicity, and socioeconomic factors in adults (30-49 years). *Journal of Biological Rhythms*, 21(1), 68-76.
- Randler, C. (2008). Morningness–eveningness, sleep–wake variables and big five personality factors. *Personality and Individual Differences*, 45(2), 191-196.
- Rathus, S. A. (1975). Principles and practices of assertive training: An eclectic overview. *The Counseling Psychologist*, 5(4), 9-20.
- Ross, R., Chaput, J. P., Giangregorio, L. M., Janssen, I., Saunders, T. J., Kho, M. E., ... & Tremblay, M. S. (2020). Canadian 24-Hour Movement Guidelines for Adults aged 18–64 years and Adults aged 65 years or older: an integration of physical activity, sedentary behaviour, and sleep. *Applied Physiology, Nutrition, and Metabolism*, 45(10), S57-S102.

Chronotype and Social Support in Enhancing Subjective Well-being of Adolescents

- Ryff, C. D. (1989). Happiness is everything, or is it? Explorations on the meaning of psychological well-being. *Journal of Personality and Social Psychology*, 57(6), 1069.
- Seligman, M. E. (2011). It is building resilience. *Harvard Business Review*, 89(4), 100-106.
- Sen, A. (2005). Human rights and capabilities. *Journal of Human Development*, 6(2), 151-166.
- Siedlecki, K. L., Salthouse, T. A., Oishi, S., & Jeswani, S. (2014). The relationship between social support and subjective well-being across age. *Social Indicators Research*, 117, 561-576.
- Vaux, A. (1988). *Social support: Theory, research, and intervention*. Praeger publishers.
- Staller, N., & Randler, C. (2021). Changes in sleep schedule and chronotype due to COVID-19 restrictions and home office. *Somnologie*, 25(2), 131.
- Walsh NA, Repa LM, Garland SN (2022). Mindful larks and lonely owls: The relationship between chronotype, mental health, sleep quality, and social support in young adults. *J Sleep Res*. 31(1):e13442. doi: 10.1111/jsr.13442.
- Western, M., & Tomaszewski, W. (2016). Subjective well-being, objective well-being and inequality in Australia. *PloS one*, 11(10), e0163345.
- Wills C, Ghani S, Tubbs A, Fernandez FX, Athey A, Turner R, Robbins R, Patterson F, Warlick C, Alfonso-Miller P, Killgore WDS, Grandner MA (2021). Chronotype and social support among student-athletes: impact on depressive symptoms. *Chronobiology International*, 38(9):1319-1329. doi:10.1080/07420528.2021.1927072. Epub 2021 May 26. PMID: 34039131.
- Zencirci, A. D., & Arslan, S. (2011). Morning-evening type and burnout level as factors influencing sleep quality of shift nurses: a questionnaire study. *Croatian Medical Journal*, 52(4), 527-537.
- Zimet, G. D., Dahlem, N. W., Zimet, S. G., & Farley, G. K. (1988). The multidimensional scale of perceived social support. *Journal of Personality Assessment*, 52(1), 30-41.

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Conflict of Interest

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